

WHAT IS CLAIMED IS:

1. A panel for a liquid crystal display, the panel comprising:
an insulating substrate with a display area; and
a plurality of spacers formed on the insulating substrate and contacting
5 the insulating substrate to support the insulating substrate,
wherein contact area of the spacers contacting the substrate becomes large
as the spacers are located closer to a center of the display area.
2. The panel of claim 1, wherein the contact area of the spacers at the
center of the display area is equal to or less than 3.2 times the contact area of the
10 spacers closest to edges of the display area.
3. The panel of claim 2, further comprising a gate wire and a data
wire formed on the insulating substrate and transmitting electrical signals such as a
scanning signal and a picture signal, a thin film transistor electrically connected to
the gate wire and the data wire and serving as a switching element for controlling
15 the picture signal, and a pixel electrode receiving a pixel voltage for drive liquid
crystal molecules.
4. The panel of claim 2, further comprising red, green and blue color
filters formed on the insulating substrate.
5. A liquid crystal display comprising:
20 two substrates facing each other and having a display area;
a sealant formed along a periphery of the substrates located external to the
display area, having a shape of a closed loop, and supporting the substrates;
a liquid crystal layer filled in a room enclosed by the substrates and the
sealant; and
25 a plurality of spacers formed between the substrates and contacting the
substrates with different contact areas to support the substrates.
6. The liquid crystal display of claim 5, wherein contact area of the
spacers contacting the substrate becomes large as the spacers are located closer to a
center of the display area.

7. The liquid crystal display of claim 6, wherein the contact area of the spacers at the center of the display area is equal to or less than 3.2 times the contact area of the spacers closest to edges of the display area.

8. A method of manufacturing a liquid crystal display, the method
5 comprising:

forming a plurality of spacers on one of two substrates having display areas, the spacers located on the display area of the one of two substrates and contacting the substrate with different contact areas to supporting the substrate;

applying a sealant on one of the substrates;

10 dropping a liquid crystal material on the substrate applied with the sealant; and

combining the substrates under a vacuum atmosphere.

9. The method of claim 8, wherein contact area of the spacers contacting the substrate becomes large as the spacers are located closer to a center
15 of the display area..

10. The method of claim 9, wherein the combination of the substrates comprises:

aligning the substrates;

evacuating a room between the substrates;

20 adhering the substrates using vacuum atmosphere;

pressurizing the substrates using atmospheric pressure;

attaching the substrates with the sealant; and

combining the substrates by hardening the sealant.

11. The method of claim 10, wherein the contact area of the spacers at
25 the center of the display area is equal to or less than 3.2 times the contact area of the spacers closest to edges of the display area when combining the substrates.